## Description of Two New Species of Amalda

(Gastropoda: Olividae: Ancillinae)

## from the South-Western Indian Ocean, with a Note on Amalda similis (Sowerby, 1859)

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(1 Plate; 1 Text figure)

Amalda (Alocospira) roscoae Kilburn, spec. nov. (Figures 2, 5)

Diagnosis: A narrowly ovate-fusiform *Alocospira* with an acuminate spire, exposed protoconch and a very obscurely spirally striate spire callus; body whorl marked below suture and above siphonal fasciole with a series of brown squares.

Description: Shape narrowly ovate-fusiform, aperture longer than spire, periphery of body whorl situated well above middle. Spire completely covered by callus deposit, except for the blunt, mamillate protoconch, which consists of  $2\frac{1}{2}$  whorls and is yellowish-white in colour; spire callus milky, with the underlying markings barely visible; surface with very faint traces of spiral grooves; this callus covers the last suture and extends down as a ridge-like deposit onto the paries and columella, where it is tinged with pale purplish pink. Base of columella narrow, sculptured by 2 oblique grooves of which the outer is the deeper; columella separated from rest of surface by a wide but shallow furrow. Siphonal fasciole wide, delimited posteriorly by a groove, and divided, as is usual for the subfamily Ancillinae, into 2 halves by an asymmetrical spiral groove; of these the basal half is buff, the other half light brown. Body whorl just posterior to fasciole with a series of irregular brown squares on a pale ground; this zone is delimited posteriorly by a shallow spiral groove, which, judging by the growth lines, originally terminated in a labral denticle (edge of lip here chipped in holotype). Posterior to this is a slightly wider uniform pale zone. Middle area of body whorl pale pinkish-brown with a

series of close axial brown streaks. Below the suture is a second zone of irregular brown squarish marks, partially covered by the spire callus; this zone is delimited anteriorly by a shallow groove.

Dimensions:  $19.6 \times 7.8 \,\mathrm{mm}$ ; aperture length  $11.1 \,\mathrm{mm}$ . Operculum narrowly leaf-shaped, nucleus subterminal. Animal not preserved.

Type Material and Locality Data: Known only from the holotype (Natal Museum G 285) which was taken from the stomach of a scavenger fish [Lathrinus miniatus (Schneider, 1801)] caught off Ponta São Sebastião in the Inhambane district of Moçambique (22°05'S; 35°24'E). It is named in honour of the discoverer, Mrs E. Roscoe.

Comparative Remarks: Amalda roscoae shows little affinity to any species yet described from South Africa or the western Indian Ocean, and its relationships appear to lie with Australian species of the subgenus Alocospira Cossmann, 1899. The closest is Amalda rosea (Macpherson, 1959) from Queensland, which possesses a colour form with subsutural and basal blotches very similar to those of A. roscoae; A. rosea, however, has a broader shell with distinct spiral ridges on the spire whorls. There is also a certain resemblance to A. oblonga (Sowerby, 1830) and A. lineata (Kiener, 1843)', from both of which A. roscoae is easily separated by its papillate apex, narrow form

<sup>&#</sup>x27; Modern Australian workers have followed IREDALE (1924) in using the later name monilifera Reeve, 1864, for this species, under the assumption that Kiener's nomen is a homonym. However, Ancilla lineata Perry, 1811 (a Nassarius) does not invalidate Ancillaria lineata Kiener, 1843 (an Amalda).

and different colouration. On the other hand it is not as narrow as A. (Gracilispira) edithae (Pritchard & Gatliff, 1898), which furthermore has a higher spire with distinct sculpture, and the markings are different; also the nucleus of the operculum in the subgenus Gracilispira Olson, 1956, is terminal (cf. Ponder, 1968). The only other Alocospira occurring in Southern Africa is Amalda errorum (Tomlin, 1921), which does not resemble A. roscoae very closely at all.

Amalda (Baryspira) trachyzonus Kilburn, spec. nov. (Figures 1, 4, 7)

Diagnosis: A broad, low-spired *Baryspira* with a finely rugose shoulder callus; there is no depressed spiral band adjacent to the fasciole; flesh-coloured with a white adapical callus and dark brown posterior fasciole and dorsal sutural band.

Description: Shape truncately conical, spire low, obtuse and rather mamilliform, covered by a smooth white callus deposit which completely masks the sutures. In addition to this, a large tongue-shaped callus pad covers all or most of the adapertural surface posterior to the siphonal fasciole; this continues down behind the labrum as a varicoid thickening, with a small lobe behind the adapical end of the lip, and also extends down the columella, forming a low axial ridge in the parietal region. The columella callus is thick and white, its base showing 3 weak, diagonal, slash-like grooves anteriorly and 2 posteriorly, the latter being more or less fused into a single wide furrow; this furrow contains a group of minute pustules, and at a point on the labium corresponding to its posterior termination there is a slight boss, almost suggestive of a columella pleat. On the abapertural side the shoulder is rendered prominent by a belt-like callous ridge, rough to the touch due to the presence of minute pustules; it is tinged or mottled with light golden-brown. At the last suture on the adapertural side between the spire callus and the shoulder there lies a C-shaped band of chestnut-brown. The siphonal fasciole, which is separated by a narrow lunate groove from the base of the columella, is bisected by an asymmetrical groove; the anterior half of the fasciole is white and bears traces of a few very fine spiral striations, while the posterior half is chestnut brown and is raised slightly above the surface of the body whorl. There is no basal groove, depressed band or labral denticle. The median zone of the body whorl is pale flesh in colour, the aperture darker flesh.

Dimensions:  $23.5 \times 14.7$  mm, aperture length 16.6 mm (holotype);  $22.1 \times 12.7$  mm, aperture length 14.3 mm;  $19.9 \times 10.8$  mm, aperture 12.6 mm (paratypes).

Type Locality: Gonubie (32°56'S; 28°01'E), East London area, Cape Province, Republic of South Africa.

Type Material: Holotype, Natal Museum No. 6811, paratypes, 2, Natal Museum No. 6813. All 3 are beach specimens, the holotype in fresh condition, the paratypes somewhat beachworn.

Remarks: The 3 specimens known show considerable variation in shape. Whereas in form the holotype closely resembles Baryspira stortha Olson, 1956, type-species of the subgenus Spinaspira Olson, 1956, the larger paratype approximates to B. robusta Marwick, 1924, type-species of Gemaspira Olson, 1956. In view of this the two subgeneric names are obviously synonymous. However, Beu (1970) points out that Gemaspira in turn intergrades with Baryspira Fischer, 1883, and both must therefore be rejected as synonyms of that.

Comparative Discussion: Only one other Baryspira of the Spinaspira-Gemaspira type is known, namely Amalda (B.) raoulensis (Powell, 1967: 198; plt. 38, figs. 4, 5) from the Kermadec Islands. This appears to be a larger, narrower species than A. trachyzonus, with a higher spire, a smooth shoulder callus and different colouration. Amalda (B.) glandiformis (Lamarck, 1811), from the Miocene of France, is a distinctly more biconical species (cf. Chenu, 1859: fig. 884). Of the 12 species described or recorded from the Oligocene-Pliocene of New Zealand by Olson (1956) there is, as has been stated, some resemblance to both A. stortha (Olson) and to A. robusta (Marwick). Amalda trachyzonus differs from these, inter alia, in the absence of a depressed spiral band above the fasciole.

## Explanation of Figures 1 to 7

Figures 1, 4: Amalda trachyzonus Kilburn, spec. nov., holotype, dimensions  $23.5 \times 14.7\,\mathrm{mm}$ 

Figures 2, 5: Amalda roscoae Kilburn, spec. nov., holotype, dimensions  $19.6 \times 7.8\,\mathrm{mm}$ 

Figures 3, 6: Amalda similis (Sowerby, 1859). Santa Carolina Island, Moçambique, dimensions  $57.3 \times 26.4\,\mathrm{mm}$ 

Figure 7: Amalda trachyzonus, paratype, dimensions 22.1 × 12.7 mm



